

REMARKS

The non-final Office Action of February 23, 2004, has been carefully reviewed, and these remarks are responsive thereto. Claims 1-16 remain pending. The specification is amended to correct minor typographical errors. No new matter is added.

The drawings are objected to for not including a reference to the emulation system 100 as disclosed in the specification. Applicants request that Figure 1 be amended as shown in the attached Appendix. Applicants believe that such an amendment renders the objection moot.

Claims 1-7 and 11-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,690,191 to Sample et al. (“Sample”) in view of U.S. Patent No. 5,297,181 to Barr et al. (“Barr”). Claims 8-10 and 14-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sample in view of Barr, and further in view of U.S. Patent No. 6,061,511 to Marantz et al. (“Marantz”).

Claims 8-10 and 14-16

Applicants respectfully submit that 35 U.S.C. 103(c) prevents Marantz from being relied upon in a 35 U.S.C. 103(a) rejection. At the time the present application was filed (and thus at the time the present invention was made by constructive reduction to practice), Marantz was owned by Ikos. Also, at the time the present application was filed, the inventors of the present application were obligated to assign the present application to Ikos. Because Marantz and the claimed invention were, at the time the invention was made, owned or obligated to be owned by the same entity, 35 U.S.C. 103(c) prevents Marantz from being used to reject the present invention under 35 U.S.C. 103(a). Therefore, Applicants respectfully request that the rejection of claims 8-10 and 14-16 be withdrawn.

Independent Claim 1

Independent claim 1 is directed to a method for transmitting a data packet between substantially asynchronous components. Claim 1 recites various features, including 1) that a framing sequence is transmitted, 2) that a data packet is subsequently transmitted serially, and 3) that each bit in the framing sequence and in the data packet is transmitted over two transmit clock cycles. The Office Action concedes that Sample fails to teach or suggest any of the claimed features.

The Office Action relies upon Barr to make up for the numerous deficiencies of Sample. In particular, the Office Action alleges that Barr teaches a framing sequence at col. 1, lns. 30-37 (in the section disclosing the *background* of the Barr invention) and at col. 3, lns. 62-68 (in the disclosure of the Barr *invention* itself). The Office Action further alleges that Barr discloses transmitting a data packet serially at col. 4, lns. 18-31 (in the section disclosing the *background* of the Barr invention). The Office Action also alleges that Barr discloses that each bit of a framing sequence is transmitted over two transmit clock periods at col. 2, lns. 40-47 (in the second disclosing the *background* of the Barr invention).

Not surprisingly, the background section of Barr describes a system that is different from Barr's own system. Therefore, the rejection of claim 1 actually attempts to combine three different systems: (1) Sample; (2) the *invention* of Barr (alleged to disclose a framing sequence); and (3) the *prior art* to Barr (alleged to disclose serial packet transmission and that each bit is transmitted over two transmit clock periods). Applicants respectfully submit that the rejection does not make out a *prima facie* case of obviousness, because the Office Action does not suggest that a motivation existed to combine the prior art system of Barr with Barr's own system.

Indeed, one of ordinary skill in the art would actually have been *discouraged* from combining the prior art system disclosed in Barr with the invention of Barr. Barr disparages, and teaches away from, using two or more transmit clock periods for each bit in Barr's own invention. Barr observes that the prior art system disclosed in the background of Barr requires too many clock periods and therefore uses excessive bandwidth. *See, e.g.*, Barr, col. 3, lns. 1-4 and 59-61. The invention of Barr seeks to reduce this bandwidth. *Id.*

Applicants also note that the Office Action relies upon Barr's background discussion of pilot tones (col. 1, ln. 33) to disclose the claimed framing sequence. However, Barr does not teach or suggest that the pilot tone is a framing sequence that is transmitted serially over a connection between asynchronous systems in accordance with a transmit clock signal, as required by claim 1. Nor does Barr even teach or suggest that the pilot tone has bits, as does the claimed framing sequence in claim 1. Nor does Barr teach or suggest that the pilot tone has bits that are transmitted over two transmit clock periods, as claim 1 requires of the recited framing sequence.

Applicants therefore respectfully submit that neither Barr nor Sample, either alone or in combination, teach or suggest all of the features of claim 1.

Independent Claim 2

Independent claim 2 is also allowable for at least similar reasons as discussed above with regard to claim 1, and further in view of the differing recitations therein.

Independent Claim 5

Independent claim 5 recites a connection between a transmitter circuit and a receiver circuit, wherein each bit of data transmitted over the connection has a duration of two or more periods of a clock signal received at a circuit board. It appears that the rejection of claim 5

attempts to combine Sample with the section disclosing the *background* of the Barr invention (alleged to disclose serial packet transmission and that each bit is transmitted over two transmit clock periods at col. 2, lns. 40-47). The Office Action alleges that it would have been desirable to combine these teachings in order to synchronize over a wide range of sampling rates, citing col. 3, lns. 29-34 of Barr. However, such a desire expressed in Barr is supposedly solved, not by the background system disclosed in Barr, *but by the invention of Barr itself*. In other words, the motivation cited by the Office Action is entirely unrelated to the background system disclosed in Barr that is proposed to be combined with Sample. Applicants therefore respectfully submit that a valid motivation to combine Sample with the *background system* disclosed in Barr itself has not been provided, and that a *prima facie* case of obviousness has not been made.

Independent Claim 11

Independent claim 11 is also allowable for at least similar reasons as discussed above with regard to claim 5, and further in view of the differing recitations therein.

Dependent Claims 3, 4, 6, 7, 12, and 13

The remaining dependent claims are also allowable for at least those reasons that their respective independent claim is allowable, and further in view of the additional features recited therein.

Conclusion

All objections and rejections having been addressed, Applicants respectfully submit that the present application is in condition for allowance, and notification of the same is requested. The Examiner is invited to contact the undersigned at the number below should the Examiner feel that an interview would expedite prosecution. Please charge any fees that may be due to our Account No. 19-0733.

Respectfully submitted,

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